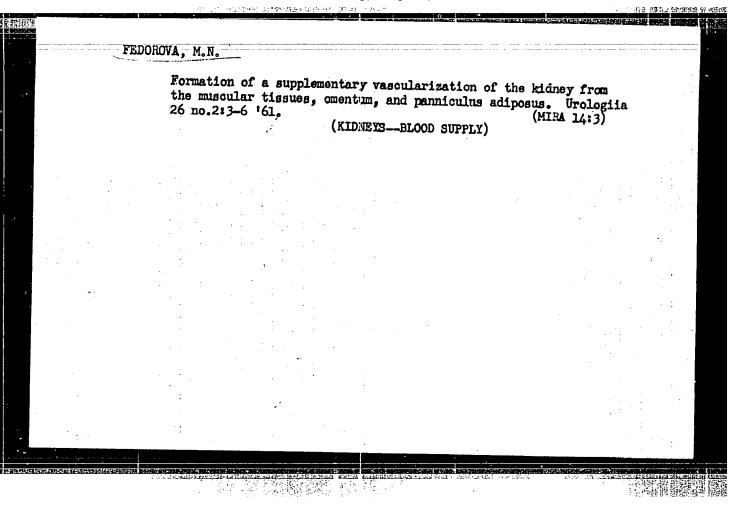


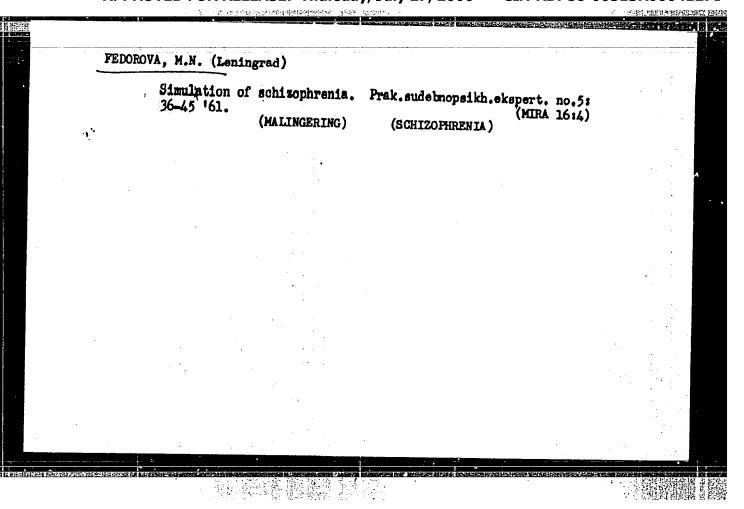
FEDCROVA, M.N.: SKORLUPKIN, S.F., red.; CHAMTSEVA, G.M., tekhn.red.

[Textbooks and menuals for mining schools] Uchebniki i uchebnye pomobile dlia gornykh uchebnykh mavedenii. Moskva, Ugletekhimdat. (MIRA 11:5)

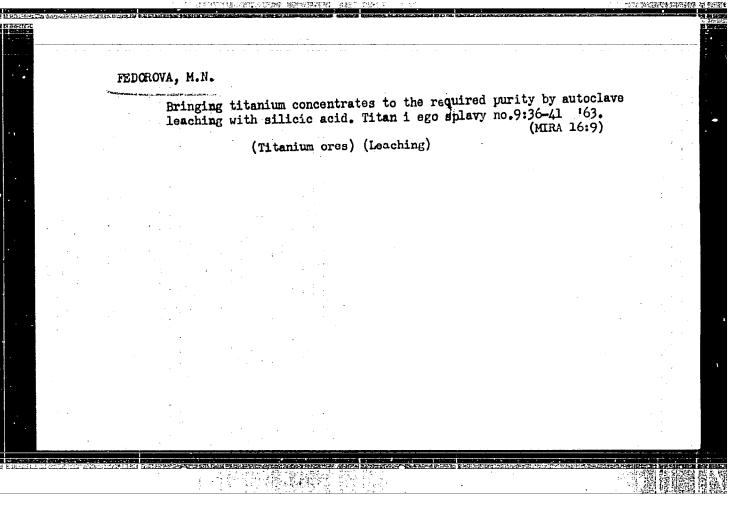
1. Runsia (1923- U.S.S.R.) Glavnoye upravleniye knishnoy torgovli.

(Bibliography--Goel mines and mining)





### "APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00041271

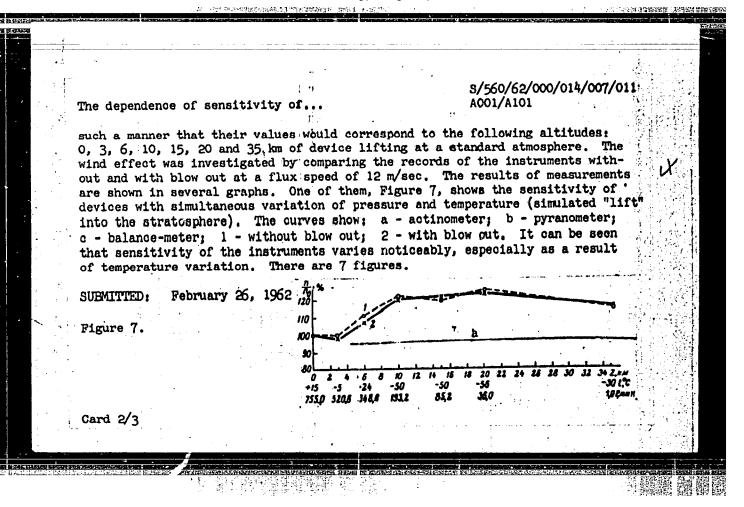


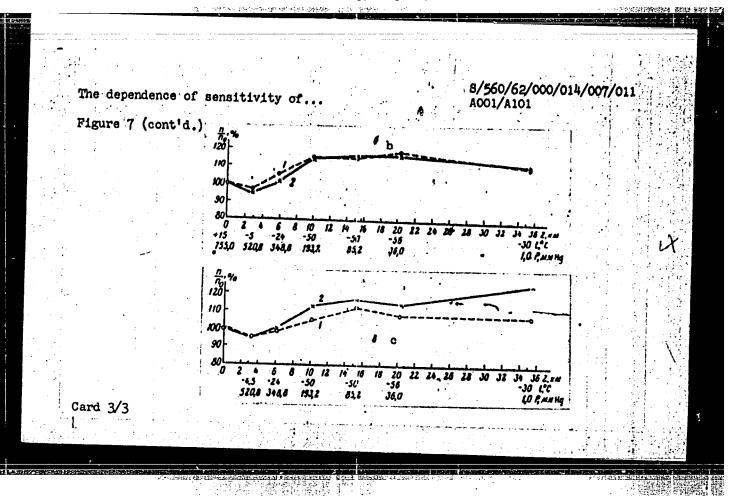
FEDOSOVA, E.N.; ERIVODURGKAY, K.S.

Phase analysis of titanium cres. Zav. 1ab. 30 no.5:515-518 '64. (MIRA 17:5)

1. Ural'skiy nauchno-issledovatel'skiy proyektnyy institut obogashcheniya i mekhanicheskoy obrabotki poleznykh iskopayemykh.

Ш835 8/560/62/000/014/007/01 A001/A101 9.6110 Gayevskaya, G. N., Fedorova, M. P. **AUTHORS:** The dependence of sensitivity of actinometric devices on tempera TITLE: ture and pressure Akademiya nauk SSSR. Iskusstvennyye sputniki Zemli. no. 14, 1962, SOURCE: 81 - 85The purpose of the present investigation was to study the sensi-TEXT: tivity of various actinometric devices to variation of temperature, pressure and wind conditions (with and without blow out). Actinometric devices investigated were actinometers, pyranometers and balance-meters. These devices, as radiation receivers, and a source of radiation, a projector, were placed inside of a thermal barometric chamber of 1 m3 in volume. The range of temperatures.was from +60 to -60°C and that of pressures from 760 to 10 mm Hg. Three different series of tests were carried out: 1) Temperature dependence was determined at a constant pressure; 2) pressure dependence was determined at a constant temperature of 16°C; 3) temperature and pressure were changed simultaneously in Card 1/3





APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00041271(

### KONDRAT'YEV, K.Ya.; FEDOROVA, M.P.

Processing and analyzing some data obtained by the measurement of components of the radiation balance of the system "earth's surface-atmosphere" from the Tiros-2 satellite. Isk.sput.Zem. no.14:95-104 '62. (MIRA 15:11)

(Artificial satellites in meteorology)

(Atmosphere)

(Heat—Radiation and absorption)

Щ837

9.6150

8/560/62/000/014/009/011 A001/A101

AUTHORS:

Kondrat'yev, K. Ya., Fedorova, M. P.

TITLE:

Fluxes of outgoing long-wave radiation incident onto differently

oriented surfaces

SOURCE:

Akademiya nauk SSSR. Iskusstvennye sputniki Zemli. no. 14, 1962,

133 - 136

TEXT: Fluxes of long-wave (thermal) and short-wave (solar) outgoing radiation are non-isotropic. Therefore, angular distribution of outgoing radiation intensity is essentially non-monotonous and varies in dependence of particular conditions. The authors calculate fluxes of long-wave radiation outgoing from the Earth and incident onto differently oriented inclined plane surfaces located in the atmosphere at an altitude of 300 km. Calculations are performed for surfaces inclined at the angle  $\alpha$  equal to 10, 20, 30, 40, 50, 60, 70, 80, 90 and for a horizontal surface, for a point located above the equator ( $\mathcal{P} = 0^\circ$ ) and above latitude  $\mathcal{P} = 65^\circ$ N. The angular distribution was calculated for summer and for three cases; cloudless atmosphere and belts of continuous chadiness with upper

Card 1/3

Fluxes of outgoing long-wave radiation incident onto... \$/560/62/000/014/009/011

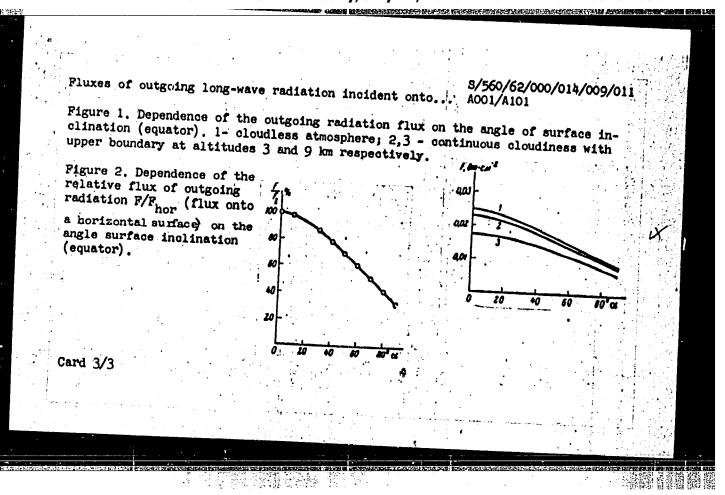
boundaries of clouds at altitudes 3 and 9 km. On the basis of intensity angular distribution data, radiation fluxes onto inclined surfaces were calculated by numerical integration by the formula:

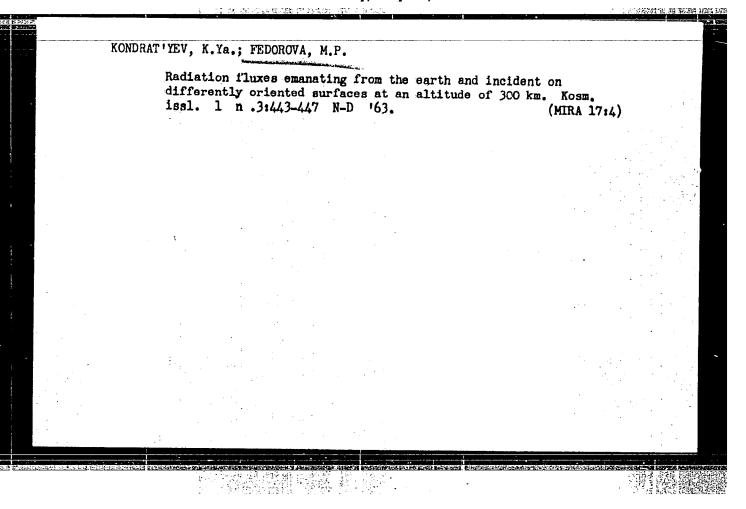
$$F = \sum_{k} I \left( \partial \gamma_{k} \right) \cos i_{k} \Delta \Omega_{k}. \tag{3}$$

where I  $(\vartheta_k)$  is radiation intensity in direction of nadir angle  $\vartheta_k$ , which is the central angle for a k-th section of the Earth's surface "seen" at an angle equal to  $\Delta \Omega_k$ ; i is angle of incidence beam onto the given surface. The results of calculation are presented graphically and in tables. (See Fig. 1 and 2). There are 2 figures and 2 tables.

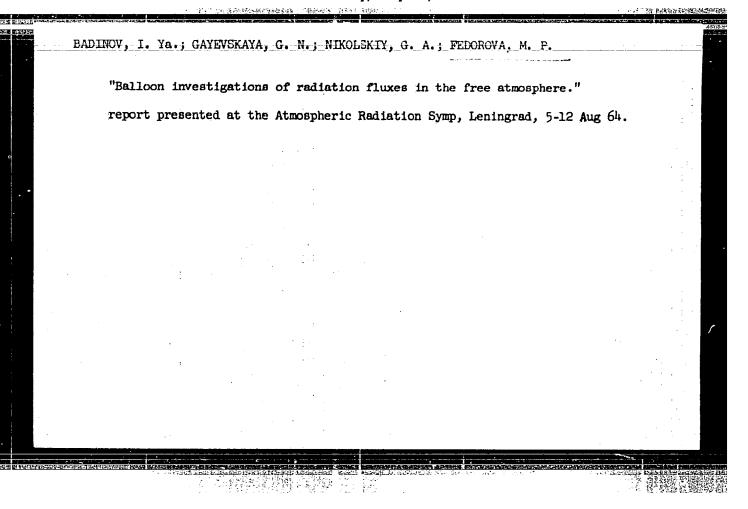
SUBMITTED: February 26, 1962

Card 2/3





## "APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00041271

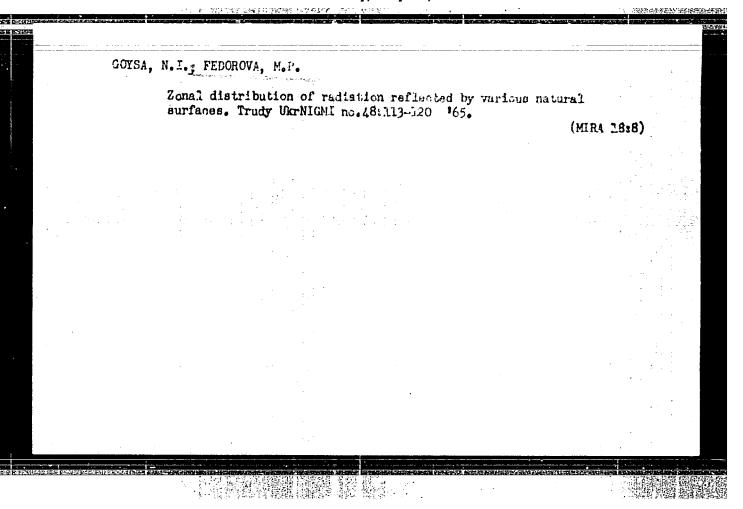


KONDRAT'YEV, K. Ya.; FEDOROVA, M. P.

"Fluxes of outgoing radiation of the earth and the problem of heat balance of satellites."

report submitted for 15th Intl Astronautical Cong, Warsaw, 7-12 Sep 64.

Leningrad State Univ



#### "APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00041271

L 2010-66 EWT(1)

ACCESSION NR: AP5026053

UR/0293/65/003/005/0730/0736 551.521.2

AUTHOR: Kondrat'yev, K. Ya.; Fedorova, M. P.

TITLE: Approximate evaluation of the influence of the albedo on the flux of out-44,55 12, 77,55

SOURCE: Kosmicheskiye issledovaniya, v. 3, no. 5, 1965, 730-736

TOPIC TAGS: shortwave radiation, albedo, isotropic radiation, zenithal distance, atmospheric layer, optical depth, solar constant

ABSTRACT: The intensity of outgoing shortwave radiation from the earth-atmosphere system depends upon the albedo of the emitting surface. A significant deviation from isotropic processes was observed at great zenithal distances of the sun and a small albedo of the ground. This circumstance was detected by instrumental data obtained at a height of 300 km. The earth's surface was seen from the instrument at a solid angle of 150° which covers an area of the earth's surface equal to ten million square kilometers and within which various albedom of ground and clouds occur. The albedo of clouds was assumed to be equal to 0.80. When the sky is only partially covered with clouds, the reflecting surfaces are at various levels and are not equally weak-

### "APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00041271

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L 2010-66		
ACCESSION NR: AP5026053	All the second of the second o	0
made for two solar zenith a given angle of inclinat Computation results are g article. The solar const	rs. Computations of fluxes of control distances, two optical depth tion to the horizontal plane and given in a table and represented tant was taken to be equal to 2.	hs of the atmosphere, and with d the azimuthal direction.  I graphically in the original of the control of the
field. Orig. art. has:	ons differ from those obtained in the figures and 1 table.	for an isotropic radiation [EC]
ASSOCIATION: none		
SUBMITTED: 19Nov64	ENCL: .00	SUB CODE: ESAA
NO REF SOV: 003	OTHER: OOO	ATD PRESS: 4/15
Card 2/2 DP .		

### "APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00041271

L 31000-66 FWT(1)/FGC ACC NR: AT6007611 SOURCE CODE: UR/2960/65/000/003/0061/0068 AUTHOR: Fedorova, M. 17 ORG: TITLE: Fluxes of scattered radiation from individual regions of the sky to inclined surfaces SOURCE: Leningrad. Universitet. Problemy fiziki atmosfery, no. 3, 1965, 61-68 TOPIC TAGS: scattered radiation, azimuth, almucantar, zenith, ring zone, radiation intensity, relative intensity, statistical dispersion ABSTRACT: Inclined surfaces irradiated by scattered radiation from the whole sky and its individual regions are used for determining the loss of scattered radiation caused by screening the horizon and eliminating some regions of the sky. The scatter ed radiation was measured in 37 directions separated by azimuths of 30° on almucantars of  $15^{\circ}$ ,  $40^{\circ}$ , and  $65^{\circ}$ , and at the zenith. These measurements were carried out in the Crimea during July and August, 1956, with cloudless skies. The whole sky was divided into ring zones according to the following almucantars: 0-27.5°; 27.5°-52.5°, and 52.5°-77.5°, for determining the intensity of scattered radiation incident on inclined surfaces from observation data. Each ring zone was further divided by a plane perpendicular to the solar vertical into the near solar semiannular belt and the far solar semiannular belt. The flux intensity was determined from six semi-

Card 1/2

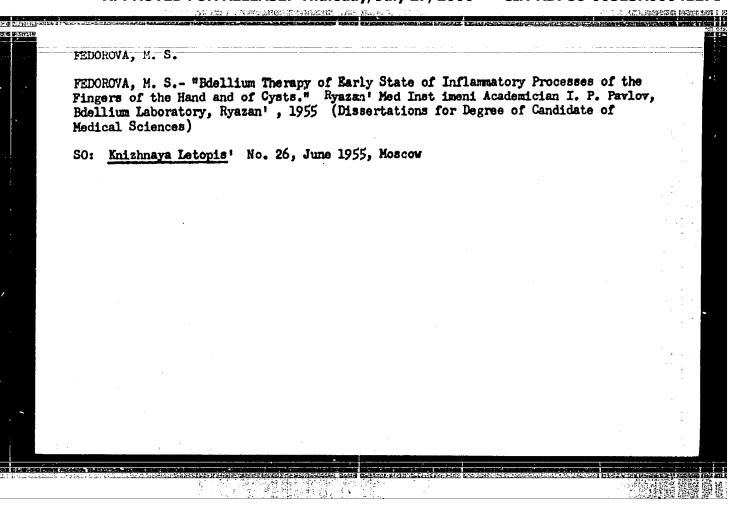
L 31000-66

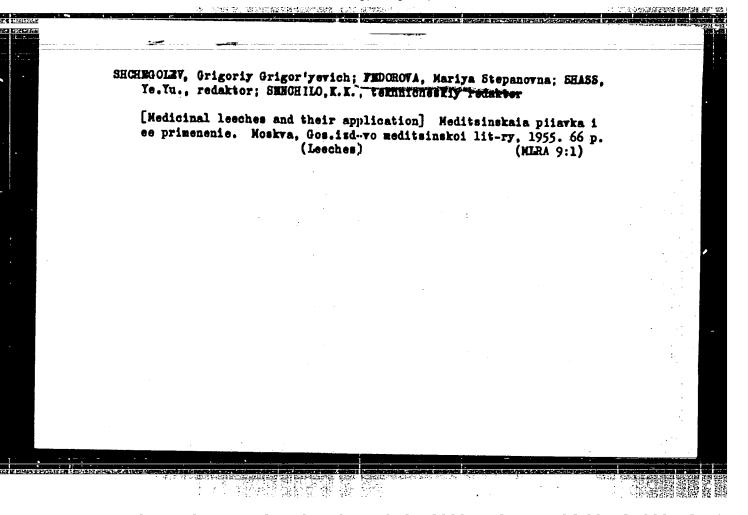
ACC NR: AT6007611

annular belts. The intensity D' determined from an individual region in the belt was divided by the intensity D of the whole belt. The ratio D'/D was considered as the relative intensity of the chosen region. Intensities of scattered light incident on surfaces of various slopes were computed for two azimuthal orientations: 0° (toward the sun) and 180° (away from the sun), and results of computations were represented graphically in the original article. The scattered radiation in the extreme belts either increased or decreased with the height of the sun. The middle belt showed a maximum of intensity at the solar height of 38° in the near sun belt and a minimum at the same height in the far sun belt. The statistical dispersion of intensities at various inclinations of the receiving surfaces depended upon the transparency of the atmosphere. Orig art. has: 3 figures.

SUB CODE: 04/ SUBM DATE: none/ ORIG REF: 001/ ATD PRESS: 4214

Card 2/2 2C





SHCHERBINA, V.V.; IGNATOVA, L.I.; KARMANOVA, I.G.; FEDOROVA, M.V.;
TVERDOKHLEBOVA, K.A.

Factors affecting the endegenetic distribution and concentration of beryllium and lithium. Min.pyr'e ne.7:18-27 163. (MIRA 16:9)

(Beryllium) (Lithium)

# FEDOROVA, M.V.

Balantidiasis in the Yaroslavl Province. Med. paraz. i paraz. bol. 3 no.2:211-21; Mr-Ap '64 (MIRA 18:1)

1. Kafedra infektsionnykh bolezney ( zav. - dotsent A.V. Gerasimova) Yaroslavskogo meditsinskogo instituta (nauchnyy rukovoditel! - prof. A.I. Titova).

SAKHAROVA, M.S., KOCHEROVSKAYA, L. V., PEDOROVA, M. Is.

Hydroromeite from Gornaya Racha. Vest. Mosk. un. Ser.
biol., pochv., geol., geog. 14 no.3:149-155 '59.

(MIRA 13:6)

1. Kafedra mineralogii Moskovskogo universiteta.

(Georgia—Hydroromeite)

8/190/62/004/012/013/015 B101/B186

AUTHORS:

Hardy, D., Nitray, K., Fedorova, N., Kováce, G.

TITLE:

Polymerization of cetyl methacrylate

PERIODICAL:

Card 1/2

Vysokomolekulyarnyye soyedineniya, v. 4, no. 12, 1962,

1872-1878

TEXT: Polymers with a vitrification temperature of  $20-25^{\circ}C$  and an intrinsic viscosity of 1.60-3.45 were obtained in the course of a study of the polymerization kinetics of cetyl methacrylate in the presence of benzoyl peroxide in N<sub>2</sub> atmosphere at  $50-80^{\circ}C$ . The degree of conversion was a linear function of time. Polymerization ceased at 66% conversion. No region of accelerated polymerization was observed as with other acrylates and methacrylates. The following data are given: constant k<sub>1</sub> of the initiation rate,  $3.09 \cdot 10^{-6}$ ; constant k of the chain growth, 98 at  $30^{\circ}C$ ; k<sub>g</sub>/k<sub>t</sub> 1/2 = 0.065 at  $30^{\circ}C$ , 1.080 at  $70^{\circ}C$ , where k<sub>t</sub> is the constant of chain termination; furthermore, k<sub>g</sub>/k<sub>t</sub> 1/2 = 42.3 exp(-2500/RT).

Polymerization of cetyl...

S/190/62/004/012/013/015 B101/B186

The gross activation energy of polymerization is 17.8 kcal/mole,  $E_g = 0.5 E_t = 2.4 \text{ kcal/mole}$  ( $E_g = \text{activation energy of the chain growth, } E_t = \text{activation energy of termination}$ ). The chain transfer coefficient  $C_M$  at  $70^{\circ}\text{C}$  is  $1.4 \cdot 10^{-5}$  for the monomer,  $9.83 \cdot 10^{-5}$  in the presence of  $\text{CCl}_4$ , and  $20.5 \cdot 10^{-5}$  in the presence of isopropyl benzene. The initiation efficiency f is only 0.14. These low values, as compared with other acrylates and methacrylates, are explained by the high molecular weight and the high viscosity of cetyl methacrylate. There are 4 figures and 4 tables.

ASSOCIATION: Nauchno-issledovatel'skiy institut plastmassovoy promyshlennosti Budapest (Scientific Research Institute of the Plastics Industry, Budapest)

SUBMITTED: June 16, 1962

Card 2/2

HARDY, Gyula; NYITRAI, Karoly; FEDCROVA, Natalia; KOVACS, Gabor

Cetyl-methacrylate polymerization. Magy kem folyoir 69 no.l:
42-46 Ja '63.

1. Muanyagipari Kutato Intezet, Budapest.

HARDY, Cyula; NYITRAY, Karoly; KOVACS, Gabor; FEDCHOVA, Katalia

Research in the field of solid-phase radiation polymerization.

Pt.1. Magy kem folyoir 69 no.10:437-441 0 163.

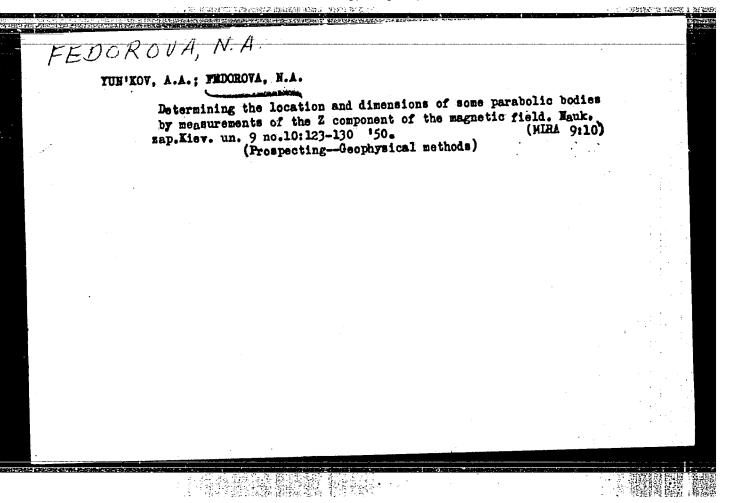
1. Muanyagipari Kutato Intezet, Budapes.

HARDY, Gyula; NYITRAY, Karoly; KOVACS, Gabor; FEDORGVA, Natalia

Research in the field of solid-phase radiation polymerization. Pt.3. Magy kem folyoir 69 no.10:447-448 0:63.

1. Muanyagipari Kutato Intezet, Budapest.

WW/RM EWP(j)/T L 17684-66 SOURCE CODE: HU/2502/65/043/002/0121/0128 ACC NR: AT 6009218 AUTHOR: Hardy, Gyula-Khardi, D'. (Doctor; Budapest); Nyitray, Karoly-Nitrai, K. (Budapest); Kovacs, Gabor--Kovach, G. (Budapest); Fedorova, Natalia (Budapest) B+1 ORG: Research Institute for the Plastics Industry, Budapest TITIE: Investigations in the field of radiation-induced solid-state polymerization. Part 1: Cetyl methacrylate SOURCE: Academia scientiarum hungaricae. Acta chimica, v. 43, no. 2, 1965, 121-128 TOPIC TAGS: polymerization, radiation polymerization, cobalt, polymerization rate, polymerization kinetics, polymerization degree The kinetics of the polymerization of cetyl methacrylate was investigated in the solid state under irradiation from Co-60 within the -195° to +60°C temperature range. Owing to an increased degree of molecular mobility, the polymerization rate significantly increased at temthe melting point. There was evidence of solid-state phase. transformation at around -16°C. Although radical inhibitors were found to be effective, the polymerization reaction was considered to be of the anionic nature. The polymerization degree was shown to be a function of cetyl methacrylate concentration. Orig. art. has: 8 figures and 1 formula. [JPRS] SUB CODE: 07 / SUBM DATE: 09Mar63 / OTH REF: 007 -FW Card 1/1



YUN'KOV, A. A.; AFANAS'YEV, N. L.; and FEDOROVA, N. A.

"An Accelerated Method for Calculating the Anomolies of Gravitational Force," Moscow, 1953

Trans - Sum No 363, 15 Mar 55

YUN'KOV, A.A.; AFANAS'YEV, N.L.; FEDOROVA, N.A.; DYUKOV, A.I., red.; SERGEYEVA, N.A., red. izd-va; MANINA, M.P., tekhn. red.

[Method for rapid computation of gravity anomalies] Uskoremnyi sposob vychisleniia anomalii sily tiazhesti. Moskva, Gos. izdvo geol. lit-ry, 1953. 57 p. (MIRA 15:2) (Gravity prospecting)

iv

88901 S/044/60/000/007/058/058 C111/C222

16.6500

AUTHOR:

Fedorova, N.A.

TITLE:

Nomograms for the calculation of H and Z over a parabolic

cylinder

PERIODICAL: Referativnyy zhurnal, Matematika, no.7, 1960, 228.

Abstract no.8328. Izv.Dnepropetr.gorn.in-ta, 1958, 36, 51-56

TEXT: The author discusses briefly the simplest construction method and the methodology of the application of nomograms which permit to determine the numerical values of H and Z with respect to given a,b,  $\alpha$  in unities of the magnetization I if the axes of coordinates x and y are horizontal, where y is perpendicular to it, while the z-axis shows vertically towards below ( $\alpha$ -angle of inclination of the cylinder;  $\alpha = x/z$ ,  $\beta = p/z$ , x -- running coordinate by which the point is given at which H or Z are measured; p -- parameter of the parabola generating the cylinder; z -- distance between the coordinate origin and the focus of the parabola).

[Abstracter's note: The above text is a full translation of the original Soviet abstract.]

Card 1/1

YUN'KOV, A.A.; AFANAS'YEV, N.L.; FEDOROVA, N.A.; LYUBCHENKO, Ye.K., red.

izd-va; IVANOVA, A.G., tekhn. red.

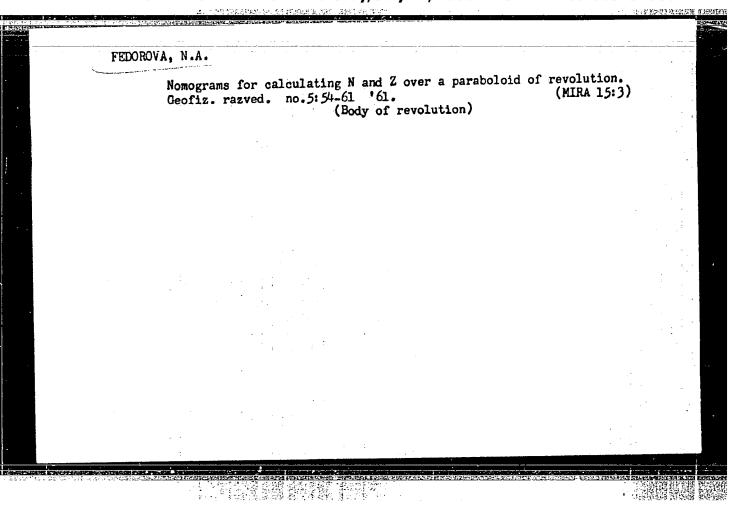
[Interpretation of \( \triangle \) g anomalies over contacts and faults] Interpretatsiia anomalii \( \triangle \) g nad kontaktami i sbrosami. Moskva, Gos.

nauchno-tekhn. izd-vo lit-ry po geol. i okhrane nedr. 1961. 34 p.

[Atlas of \( \triangle \) g charts for 10° \( \sigma \leq \leq \leq \leq \leq 170° \right] Atlas paletok \( \triangle \) g

dlia 10° \( \leq \sigma \leq 170° \cdot \leq \leq \leq 170° \cdot \leq \leq (MIRA 14:11) \)

(Gravity prespecting)



## FEDOROVA, N.A. [Fedorova, N.O.]; KOFKOVA, A.I.

Determination of cerebral phosphoproteins with the aid of specific phosphoproteinphosphatases. Ukr. biokhim. zhur. 36 no.3:469-475 164. (MIRA 17:10)

1. Laboratoriya khimii belka i kafedra biokhimii Leningradskogo universiteta.

APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00041271(

う(3) AUTHORS:

Yarovenko, N. N., Gaziyeva, G. B.,

507/79-29-3-38/61

Shemanina, V. N., Fedorova, N. A.

TITLE:

Syntheses of Organoselenium Compounds Using Carbon Selenide as the

Initial Product (Sintezy selenoorganicheskikh

soyedineniy, iskhodya iz selenougleroda)

PERIODICAL:

Zhurnal obshchey khimii, 1959, Vol 29, Nr 3,

pp 940-942 (USSR)

ABSTRACT:

The aim of the investigations reported in the present paper was the synthesis of new selenium compounds,

using carb n selenide as initial product. Carbon selenide is known to be one of the simplest and best accessible selenium carbon compounds. It is formed in the reaction of carbon tetrachloride with phosphorus pentaselenide (Refs 1,2), cadmium selenide (Ref 3) or with hydrogen selenide, as well as in the heating of elementary selenium with methylene chloride in the nitrogen current (Ref 5); the last method is considered the best. Carbon selenide

readily reacts with chlorine under formation of

Card 1/3

trichloromethyl selenium chloride (Ref 5)

Syntheses of Organoselenium Compounds Using Carbon Selenide as the Initial Product

507/79-29-3-38/61

Cl<sub>2</sub>CCl<sub>3</sub>SeCl. At low temperatures it is possible to obtain higher yields (up to 73%) of trichloromethyl selenium chloride. The authors found that the latter readily reacts with potassium cyanide under formation of trichloromethyl selenium cyanate: CCl<sub>3</sub>SeCl KCN CCl<sub>3</sub>SeCN.

In the reaction of trichloromethyl selenium chloride with ethylene trichloromethyl-B-chloroethyl selenide is formed:

CH<sub>2</sub>=CH<sub>2</sub>CCl<sub>3</sub>SeCH<sub>2</sub>CH<sub>2</sub>Cl. In the reduction of trichloromethyl selenium chloride with metallic tin in the hydrochloric acid medium the dimer of the selenium carbonyl chloride is obtained: CCl<sub>3</sub>SeCl Sn (CCl<sub>2</sub>Se)<sub>2</sub>. In the

Card 2/3

reaction of carbon selenide with selenium dioxide the

Syntheses of Organoselenium Compound: Using Carbon SOV/79-29-3-38/61
Selevide as the Initial Product

SeO<sub>2</sub> + oleum carbon selenium oxide is formed: CSe2-

There are 5 references.

SUBMITTED:

February 7, 1958

Card 3/3

"The Problem of Artificial Hypothermia in Cardiac Surgery," by P. A. Kupriyanov, B. S. Uvarov, Ye. V. Gubler, G. A. Akimov, N. A. Fedorova, and A. N. Savchenko (Leningrad), Klinicheskaya Meditsina, Vol 34, No 10, Oct 56, pp 3-13

Artificial hypothermia has great surgical significance in making complicated operations on the heart and major blood vessels possible. It is based on increased endurance by an organism of trauma and oxygen deficiency and decreased metabolism and oxygen requirement. Five typical stages of artificial hypothermia are described. A study of the changes in the body temperature, oxygen requirement and pulmonary ventilation during artificial hypothermia shows that intratracheal ether narcosis does not always ensure either decreased reflex reaction to cold or temporary decreased oxygen requirement during hypothermia. However the relationship between oxygen requirement and the mechanisms that supply it is usually favorable.

Sum. 1391

ELLINDYH, W.H.

The use of neuroplegic agents produces a more thorough decrease of undesirable reflexes, but they exert unfavorable effects on the heart and hemodynamic system thereby interfering with the oxygen supply.

Metabolic studies of carbohydrates and phosphorus compounds of the brain and cardiac muscle of rabbits under hypothermia of 20 - 22°C reveal that hypothermia does not cause any essential changes in the content of adenosine triphosphoric acid, phosphocreatine, glycogen, and lactic acid either in the brain or in the cardiac muscle.

Disturbances in carbohydrate and phosphorus metabolism arising due to the isolation of the heart from the general circulation for 10-15 minutes under hypothermia were of a reversible nature and less marked than those resulting from isolation of the heart for 3-4 minutes under normal temperature in rabbits.

The most dangerous complication during hypothermia was the disturbance of cardiac rhythm and especially ventricular fibrillation. This danger was commensurate with the depth of hypothermia. One of the most effective means of preventing arythmia was proper gas exchange.

The authors conclude that considering the complexity and the lack of knowledge of the pathophysiology of artificial hypothermia, it should be used only in certain operations on the heart and major blood vessels and only under circumstances where other simpler and less dangerous means of anesthesia would fail. (U)

Sum. 1591

APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R000412710

USSR/Human and Animal Physiology. Blood Circulation. Heart.

ጥ

Abs Jour: Ref Zhur-Biol., No 20, 1958, 93202.

Author Fo

: Fedorova, N.A.

Title

: Carbohydrate-Phosphorus Metabolish of the Heart Muscles in Conditions of Hypothermia and Shutdown of Circulation.

Ord. Pub: Vopr. ned. Lining, 1997, 3, No 4, 301-311.

Abstract: The relationship of ITP, phosphocreatine, incremic P, and lactic acid in the heart of the rebolit in hypothermia did not change, which confirmed the absence of exygen starvation. With the shutting off of the circulation the arount of ITP and phosphocreatine decreased considerably more slowly with a hypothermal temperature than with a normal one. Lactic acid accumulation was

Card : 1/2

50

# APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R0004127

USSR/Huran and Animal Physichogy. Bleed Circulation. Reart.

T

Mbs Jour: Ref Zhur-Biol., No 20, 1958, 93202.

also retarded. Restoration of circulation 10 minutes after its shutdown led to a rapid and complete regeneration of ATP, phospho-creatine, and inorganic P; a decrease in the amount of lactic acid took place more slowly. -- V. Yu. Ostrovskiy.

Card : 2/2

FEDOROVA, N. A., Cand Biol Sci -- (diss) "Carbohydrate-phosphorus meta-bolism in the cardiac muscle under conditions of hypoxia and hypothermia."

Len, 1958. 15 pp (Len Order of Lenin State Univ im A. A. Zhdanov), 100 copies (KL, 16-58, 119)

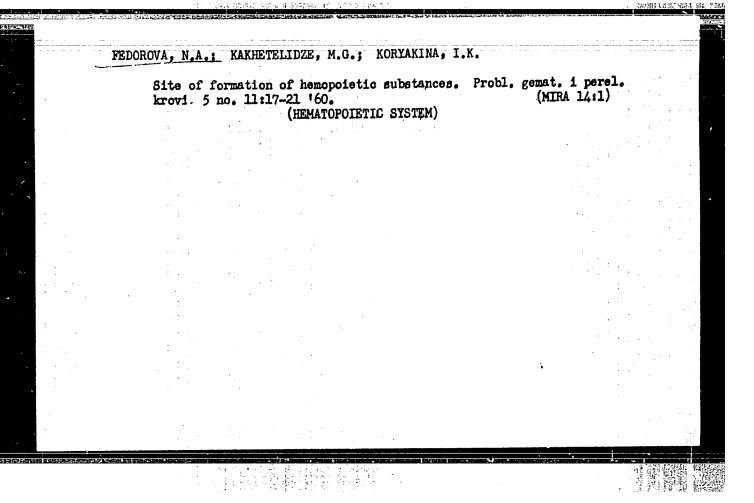
-46-

APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00041271(

### FEDOROVA, N.A.

Speed of the restoration of adenesine triphesphoric acid in the cardiac muscle of the rat at different temperatures. Uch. sap. IGU no.239: 216-220 '58. (MIRA 12:1)

1. Kafedra biekhimii Leningradskege gesudarstvennege universiteta.
(ADENOSINETRIPHOSPHORIC ACID) (HEART--MUSCLE)
(TEMPERATUHE---PHYSIOLOGICAL EFFECT)



# VLADIMIROVA, G.Ye. [deceased]; KOMKOVA, A.I.; FEDCHOVA, N.A. The free energy of phosphoserine hydrolysis. Biokhimita 26 no.3: 426-430 My-Je '61. (MIRA 14:6) 1. Laboratory of Protein Chemistry, Chair of Biochemistry, State University, Leningrad. (PHOSPHOPROTEINS) (FORCE AND ENERGY) (HYDROLYSIS)

FEDÖROV, V., kand. tekhn. nauk: FEDOROVA, N., kand. tekhn. nauk

Foundations for heaving soil with the base laid in the stratum
of seasonal freezing. Na stroi. Ros. 3 no.10:10-11 0 '62.

(MIRA 16:6)

(Russia, Northern—Foundations)

KOMKOVA, A.I.; FEDOROVA, N.A.; MEZHEYEVSKIY, T.

Phosphoprotein phosphatase from a hog's spleen. Biokhimiia 28 no.3: 482-485 My-Je '63. (MIRA 17:2)

1. Laboratory of Protein Chemistry, State University, Leningrad.

FEDOROVA, N.A.; KOMKOVA, A.I.

Phosphoprotein phosphatase and phosphatase activity of protein fractions from a hog's spleen. Vest. LGU 18 no.21:168-171 '63 (MIRA 16:12)

FEDEROVE, N.A.

USSR/Cultivated Plants - Grains.

M-2

Abs Jour

: Ref Zhur - Biol., No 7, 1958, 29663

Author

; Fedorova, N.A.

Inst

: Ukrainian Scientific Research Institute for Agriculture.

Title

: Ways of Obtaining High Yields of Winter Wheat.

Orig Pub

: V sb.: vopr. razvitiya s. kh. Poles'ya. Kiyev, AN USSR,

1956 (1957), 55-64.

Abstract

: Findings of the Ukrainian Scientific Research Institute for Agriculture on the use of fertilizers in the kolkhozes of the forested area (Foles'ye) of the Ukrainian SSR. The application of organo-mineral mixtures in the rows on podzolic soils yielded a grain yield increase of 3-4 centners per hectare. The best crops for preceding winter wheat were lupine on fallows, perennial and annual grasses. It

is recommended that the lupine be plowed for green

Card 1/2

- 13 -

APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP8

홍루 함께 속

CIA-RDP86-00513R000412710

Time for sowing winter crops in the Ukrainian Polesye. Zemledelie
4 no.8:56-59 Ag \*56. (MIRA 10:1)

1. Ukrainskiy nauchno-issledovatel'skiy institut zemledeliya.

(Polesye-Sowing)

USSR/Cultivated Plants - General Problems.

M

Abs Jour

: Ref Zhur Biol., No 18, 1958, 82243

Author

: Fedorova, N:A., Gurileva, M.A., Kostlan, N.V.

Inst

. —

Tit\_e

Methods of Determining the Viability of Winter CRops

Orig Pub

: Byul. pofiziol. rasteniy, 1957, No 1, 29-33

Abstract

Direct growth is considered the primary method. However, the water method (M. Bugayevskiy), the sugar growth method (Kuperman and Kucheryavaya) and others belong to those techniques which speed p the process and are less laborious and still have not been widely utilized. At the Chair of Darwinism in Mowcow University one has worked out a determination method on the basis of the condition of the apical cones (thier turgescence, degree of browning and turbidity). Upon checking 316 specimens of those plants which proved to lack viability in the instance of direct growth, no

Card 1/2

FEDOROVA N.A.

AUTHORS:

Fedorova, N. A.; Gurileva, M. A.

:\$4,4°

TITLE:

On the Determination of the Viability of Winter Crops by the Condition of the Growth Cone (Ob opredelenii żhiznesposobnosti ozimnykh kultur po sostoyaniyu konusa narastaniya)

PERIODICAL:

Meteorologiya i Gidrologiya 1957, No. 2, pp. 34-35 (U.S.S.R.)

ABSTRACT:

This method of determination was developed at the Moscow State University and according to this method, the non-viability of a plant is distinguished from viability by the full loss of turgor and by the appearance of a brown coloration of the cells of the stalky growth cone. The advantage of the method lies in the simplicity of selecting samples, the speed of their analysis, and the chance of checking the condition of winter crops according to samples sent in. A determination of the viability of winter crops was made from samples sent in by agrostations and kolkhozes of various regions in the Ukraine, wherein 318 samples were analyzed for a part of which direct growth data were derived. A comparison of the results of evaluation of the viability of plants by direct growth and by the state of the stalk cone of growth showed considerable divergences.

Card 1/3

On the Determination of the viability of Winter Crops by the Condition of the Growth Cone

The following conclusions were drawn: 1. Data derived by the method of fixing the viability of plants according to the state of growth cone with a consideration of the indexes recommended in the Chirkov article do not coincide with results of direct growth. 2. Considering the feasibility of developing a method of evaluating the viability of winter crops which (method) furnishes the chance of more widely taking advantage of the observations of productive plantings of kolkhozes and sowkhozes, more reliable indexes must be found which permit the objective recognition of the non-viability of plants.

3. In the group of indexes of the evaluation of the viability of plants, there should be included the coloration of the tissues of bases of shoots and of stalky cone growths, an examination of the plants under an apparatus for luminescent analysis, and a determination of the activity of absorption of marked phosphorus.

There are no graphics in the text; there is one reference, which is Slavic. Yu. I. Chirkov (1) is cited with respect to his article which recommends the replacement of the method of direct growth (monolithic) by the method of determining viability of winter crops by the state of the cone growth.

Card 2/3

On the Determination of the Viability of Winter Crops by the Condition of the Growth Cone

ASSOCIATIONS:

The studies were conducted at the suggestion of the Ministry of Agriculture of the U.S.S.R., & the Ministry of Agriculture of the Ukrainian SSR by the Ukrainian Scientific-Investigatory Institute of Agriculture and the Ukrainian Scientific-Investigatory Institute of the Physiology of Plants in 1956.

PRESENTED BY:

SUBMITTED:

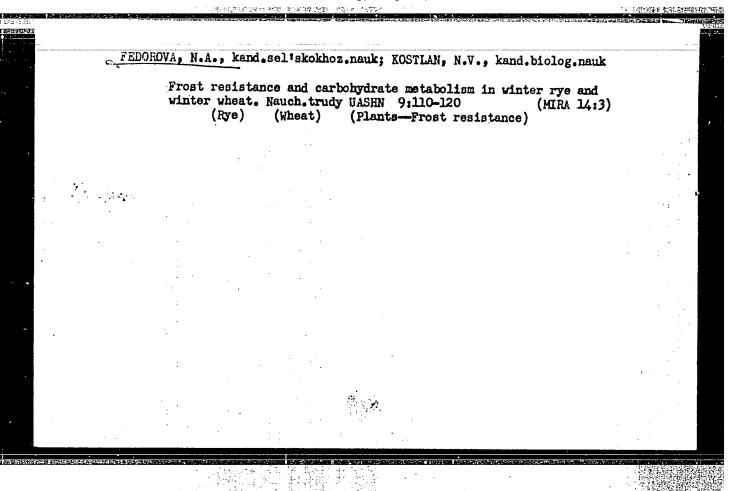
AVAILABLE:

Card 3/3

FEDOROVA, N.A., kand. sel'skokhoz. nauk

Measures for controlling the winterkilling of grain crops in the Ukraine. Zemledelie 7 no.8:40-47 Ag '59. (MIRA 12:10)

1. Ukrainskiy nauchno-issledovatel'skiy institut zemledeliya. (Ukraine--Srain) (Plants--Frost resistance)



YUKHIMCHUK, F.P. [IUkhymchuk, F.P.], otv. red.; VISHINSKIY, O.M.

[Vyshyns'kyi, O.M.], red.; GOLOMBA, R.A. [Holomba, R.A.]

red.; DMITRENKO, P.O. [Dmytrenko, P.O.], doktor sel'khoz.

nauk, red.; IL'YASHENKO, M.G. [Illiashenko, M.H.], red.;

KOLOHOV, O.M., red.; KUKSIN, M.V., red.; LAZURSKIY, O.V.

[Lazurs'kyi, O.V.], kand. sel'khoz. nauk, red.; POPOV,

F.A., red.; SAMBUR, G.M. [Sambur, H.M.], red.; SAMTSEVICH,

S.A. [Samtsevych, S.A.], red.; FFIXOROVA, N.A., kand.sel'khoz.

nauk. red.; YASHOVSKIY, I.V. [IAshovs'kyi, I.V.], red.

[Nutrition and fertilizers of farm crops] Zhyvlennia ta udobrennia sil's'kohospodars'kykh kul'tur. Kiev, Urozhai, 1964. 137 p. (MIRA 17:10)

1. Ukrains'kyy naukovo-doslidnyy instytut zemlerobstva.

YUKHIMCHUK, F.P.[IUkhymchuk, F.P.], otv. red.; VISHINSKIY, O.M.

[Vyshyns!kyi, O.M.], red.; COLOMBA, R.A.[Holomba, R.A.],

red.; DMITRENKO, P.O.[Dmytrenko, P.O.], red.; IL!YASHENKO,

M.G.[Illiashenko, M.H.], red.; KOLOBOV, O.M., red.;

KUKSIN, M.V., red.; LAZURSKIY, O.V.[Lazurs!kyi, O.V.], red.;

POPOV, F.A., red.; SAMBUR, G.M.[Sambur, H.M.], red.;

SAMTSEVICH, S.A.[Samtsevych, S.A.], red.; FEDOROVA, N.A., red.;

KATRENKO, K.A., red.

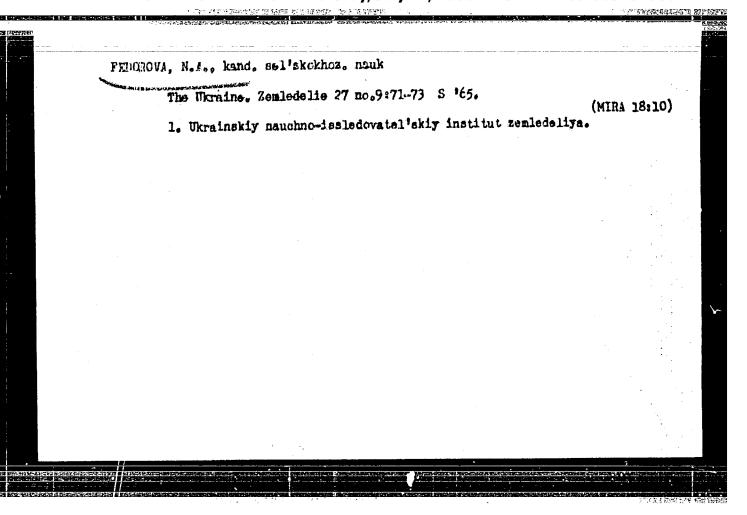
[Fertilizers and cultivation practices] Dobryva ta agrotekhnika. Kyiv, Urozhai, 1964. 160 p. (MIRA 17:12)

1. Kiev. Ukrains'kyi naukovo-doslidnyi instytut zemlerobstva.

CHISTOVICH, L.A.; KOZHEVNIKOV, V.A.; ALYAKRINSKIY, V.V.; BONDARKO, L.V.; GOLUZINA, A.G.; KLAAS, Yu.A.; KUZ'MIH, Yu.I.; LISENKO, D.M.; LYUBLINSKAYA, V.V.; FEDOROVA, N.A.; SHUPLYAKOV, V.S.; SHUPLYAKOVA, R.M.

[Speech: Articulation and perception] Artikuliatsiia i vospriiatie. Moskva, Nauka, 1965. 240 p. (MIRA 18:2)

1. Akademiya nauk SSSR. Institut fiziologii im. I.P.Pavlova.



NLIMENTOVA, A.S., FEDOROVA, H.A.

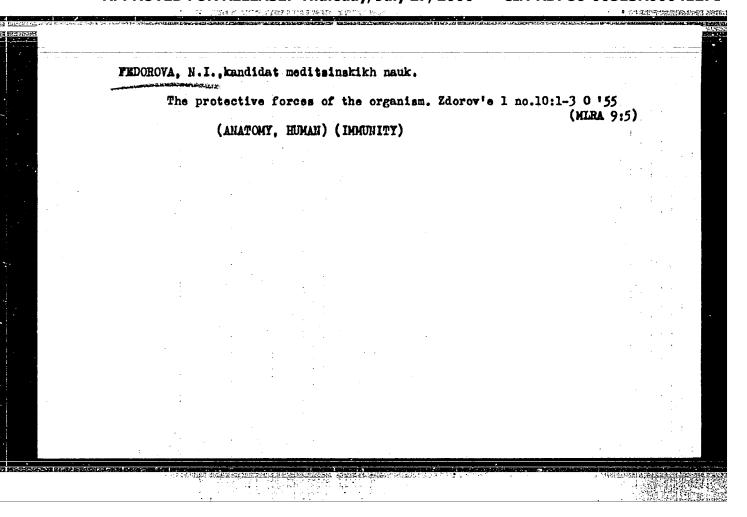
Outhreak of dysentory of alimentary origin. Zhuremikrobiole, opide 1 imme 42 no.91143-144 8 '65. (MINA 18:12)

1. Submitted Harch 28, 1964.

FEDOROVA. H. I.

5894. FEDOROVA, N. I. - Chto rasskazal nam vrch o dizenterii. 1zd 3-yo.
Tula, oblknigoizdat, 1954. 24s. s ill. 20 sm. (Obl. dom san.
prosvechemya). 5.000 ekz. 40K 616.935 (55-869)

SO: Krizhmaya Letopis', Vol. 1, 1955



FEDOROVA, N. I., KALMYKOV, N. L., ZUBKOVA, R. I.

"Tests of Mass Vaccination Against Q Fever." Proceedings of Inst. Epidem and Microbiol im. Gamaleya 1954-56.

Division of Rickettsiosis, Zdrodovskiy, P. F., Active Member of Academy of Medical Sciences USSR, Professor, head, Inst. Epidem and Microbiol im. Gameleya AMS USSR.

SO: Sum 1186, 11 Jan 57.

### ZUBKOVA, R.I.: JEDOROVA H.L. KALMYKOV, N.L.

Experience in mass vaccination against Q fever, Report no.1: Capacity of Q fever vaccine to produce resetivity and immunity. Zhur, mikrobiol. epid. i immun. 27, no.7:24-27 Jy '56. (MIRA 9:9)

1. Iz Instituta epidemiologii i mikrobiologii imeni N.F.Gamelei ANN SSSR. (Q FEVER, prev. cud control

vace. & capacity of vaccine to produce reactivity & immun.)

(VACCINES AND VACCINATION

Q fever vacc. & capacity of vaccine to produce reactivity & immun.)

abst. - Sum. 1085, 7 Oct. 1956

KULAGIN, S.M.; SOKOLOVA, N.F.; PEDOROVA, N.I.

Resistance of the Q fever pathogen to some physical and chemical agents. Zhur.mikrobiol.epid. i immun. 27 no.7:28-32 Jy '56.
(MIRA 9:9)

1. Iz Instituta epidemiologii i mikrobiologii imeni N.F.Gamelei AMN SSSR i TSentral'nogo nauchno-issledovatel'skogo dezinfektsion-nogo instituta.

(RICKETTSIA

burneti, resist. to phys. & chem. agents)

abstract - Sum 1085, 9 Oct. 56

JEDOROVA N. J., REKTEMIROV, T.A.; TARASEVICH, I.V.; KERRARATEV, E.B.;

SEMASHKO, L.L.

Distribution of Q fever among cotton mill workers. Zhur.mikrobiol.
epid. i immun. 27 no.11:27-30 H '56.

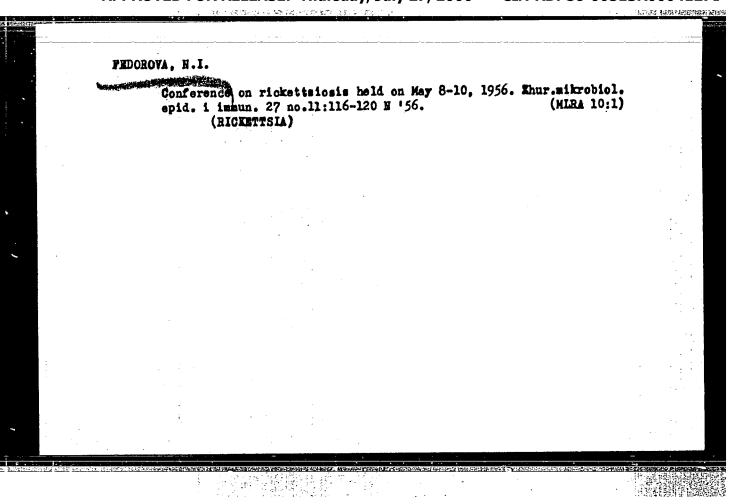
1. Is Institute epidemiologii i mikrobiologii ineni N.F.Gemalei AMF
SSSR i Ashkhabadekogo institute epidemiologii, mikrobiologii i gigiyeny
(Q FEVER, epidemiology,
in cotton workers (Rms))
(OCCUPATIONAL DISPASES,
Q fever in cotton workers (Rms))

### ZUBKOVA, R.I.; FEDOROVA, H.I.; KAIMYKOV, H.L.

Result of mass vaccination against Q fever. Report no.2: Late results of vaccination. Zhur.mikrobiol.epid. i immun. 27 no.11: 18-20 H \*56. (MIRA 10:1)

1. Is Instituta epidemiologii i mikrobiologii imeni N.F.Gamelei. AMN SSSR.

(Q FRVER, prevention and control, vacc, in Russia (Rus))



YEDUROVA, M.I.; TARASEVICH, I.Y.; SERGEYEVA, A.I.; SHLYAKHTUROVA, Ye.D.;

M.

Q fever in Daghestan. Zhur.mikrobiol.epid. i immun. 28 no.6:36-39
Je '57. (MIRA 10:10)

1. Iz Instituta epidemiologii i mikrobiologii imani Gemalei AHN
SSSR i Dagestanskoy respublikanskoy sanitarno-epidemiologicheskoy
stantsii

(Q FEVER, epidemiology,
in Russis (Rus))

### MEDOROVA, H.I.

Survival of Rickettsia burneti in the external environment, their resistance to the action of physical and chemical agents and methods of disinfection. Gig. i san. 23 no.11:53-58 N '58 (MIRA 12:8)

1. Is Instituta epidemiologii i mikrobiologii imeni N.F. Gamalei AMN SSSR.

(RICKETTS IA)

KULAGIN, S.M.: FEDOROVA, N.I.; BELAVSKIY, Ye.B.; ANASHKINA, L.Ya.: MARKARYAN, A.G.

Outbrenk of Q fever in the Yeroslav Province. Zhur.mikrobiol.epid.
i immun. 29 no.2:44-51 F '58. (MIRA 11:4)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMM SSSR,
Yaroslavskoy oblastnoy sanitarno-epidemiologicheskoy stantsii i Ministerstva zdravockhreneniya REFSR.

(Q FEVER epidemiology,
in Russia (Rus)

E

Country: USSR

Category: Virology. Viruses of Man and Animals.

Rickettsias.

Abs Jour: Ref Zhur-Diol., No 23, 1958, No 103551

Author : Kulngin, S.M.; Fedorova, N. I.; Sokolova, H.F.

Inst

Title

: The Problem of the Survival of Rickettsia burneti

in Water and the Mothods of Killing It

Orig Pub: Zh. mikrobiol., epidemiol. i irranobiol., 1958, No 2,

62-66.

Abstract: The Rickettsia burneti survives in water no less than

160 days (period of observation). The author believes that the water route of transmission of the causal agent is confirmed thereby. Chlorination of water containing rickettsias in a dilution of 10-3 disinfects

: 1/2 Card

PEDOROVA, N.I.; TAV'YEV, B.M.; HUMYANTSEVA, Ye.V.

Specific vaccination against Q fever. Zhur. mikrobiol. epid: 1 immun. 29 no.8:75-80 kg 158. (MIRA 11:10)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR i Saratovskoy oblastnoy sanitarno-epidemiologicheskoy stantsii. (Q FEVER, prev. & control. vacc. (Rus))

# SOKOLOVA, N.F.; FEDOROVA, N.I.

Further studies on the resistance of Rickettsia burneti to certain chemical preparations. Zhur. mikrobiol. epid. i immun. 29 no.8:81-85 Ag '58. (MIRA 11:10)

Ag '58.

1. Iz TSentral'nogo nauchno-issledovatel'skogo dezinfektsionnogo instituta i Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.

(COXIELIA BURNETII, effects of drugs on, resist. to various prep. (Rus))

٠,

KULAGIN, S.M.; SOKOLOVA, H.J.; FEDOROVA, H.I.

Disinfection of surfaces infected with Coxiella burnetii. Zhur. mikrobiol. epid. i immun. 29 no.8:89-92 Ag '58. (MIRA 11:10)

1. Iz TSentral'nogo nauchno-issledovatel'skogo instituta i Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.

(COXIELIA EURNETTI.

surfact disinfection (Rus))

(antisups is and asups de,

surface disinfection of Coxiella burnetii (Rus))

FEDOROVA, N.I., NIKOLISKAYA, V.N.

Experimental mixed Q fever and typhus. Zhur.mikrobiol.epid.i immun. 31 no.9:13-18 S '60. (MIRA 13:11)

1. Iz Instituta epidemiologii i mikrobiologii imeni <sup>G</sup>amalei AMN SSSR.
(Q FEVER) (TYPHUS FEVER)

## FEDOROVA, N.I.; TAV'YEV, B.M.; RUMYANTSEVA, Ye.V.

Studies on the duration of postvaccinal immunity in Q fever. Zhur.mikrobhol.epid.i immun. 31 no.9:30-32 S '60. (MIRA 13:11)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR 1 Saratovskoy oblastnoy saniterno-epidemiologicheskoy stantsii. (Q FEVER)

KULAGIN, S.M.; SOMOV, G.P.; SILICH, V.A.; FEDOROVA, N.I.; SHAPIRO, M.I.; SUVOROVA, L.V.; BOBROVSKIY, V.N.

Further observations on tick-borne rickettsiosis in the Maritime Territory. Zhur.mikrobiol.epid.i immun. 31 no.9:64-71 S '60.

(MIRA 13:11)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN

SSSR, Vladivostokskogo instituta epidemiologii, mikrobiologii i
gigiyeny i meditsinskoy sluzhby Tikhookeanskogo flota.

(MARITIME TERRITORY\_TYPHUS FEVER)

FEDOROVA, N.I.; ZOLOTOR'YAN, T.G.; BRONSHTEYN, N.I.; DYKMAN, L.P.; VURZEL', G.G.; YABLONSKAYA, Z.I.

Outbreak of Q fever among students of the Moscow Technological Institute of Meat and Dairy Industry. Zhur. mikrobiol., epid. 1 immun. 33 no.1:114-118 Ja 162. (MIRA 15:3)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR, Moskovskoy gorodskoy sanitarno-epidemiologicheskoy stantsii i Vsesoyuznogo instituta myasnoy promyshlennosti.
(Q FEVER)

## FEDOROVA, N.I., DYUSALIYEVA, R.G.

Dependence of the antigenic activity of Ricketteia burnetii on phasic variability. Zhur.mikrobiol., epid.i immun. 33 no.8:95-100 Ag '62. (MIRA 15:10)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.

(RICKETTSIA)

KULAGIN, S.M.; FEDOROVA, N.I.; KETILADZE, Ye.S.

Laboratory outbreak of hemorrhagic fever with the renal syndrome; clinical and epidemiological characteristics. Zhur. mikrobiol. epid. i immun. 33 no.10:121-126 0'62 (MIRA 17:4)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gemalei AMN SSSR i Instituta virusologii imeni Ivanovskogo AMN SSSR.

FEDOROVA, N.I.; DYUYSALIYEVA, R.G.

Relation of the immunogenic activity of Rickettsia burneti to its phasic variability. Zhur. mikrolbiol., epid. i immun. 40 no.6:68-74 Je '63. (MIRA 17:6)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.

APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00041271(

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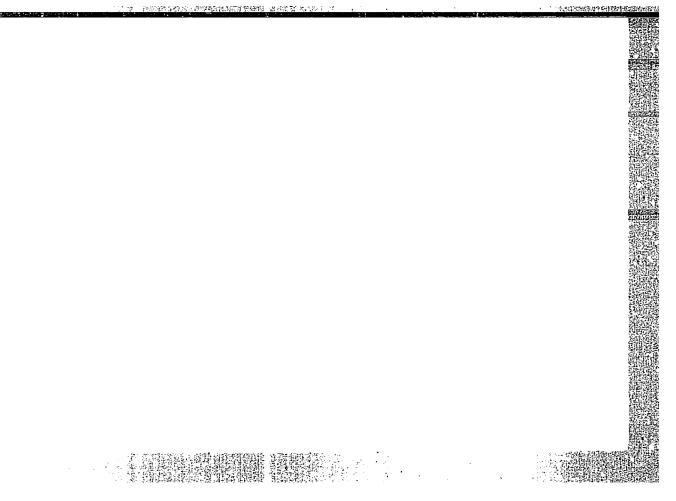
# FEDOROVA, N.I.

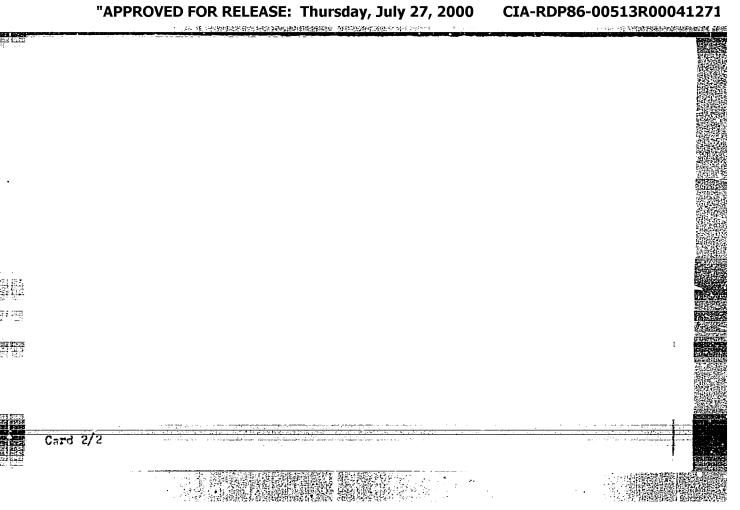
Place of Q fever in the classification of infectious diseases. Zhur. mikrobiol.,epid.i immun. 40 no.12:65-68 D \*63.

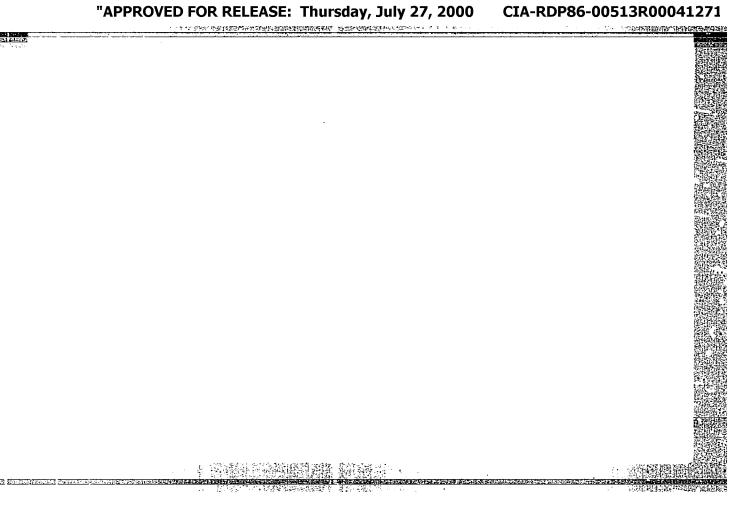
(MIRA 17:12)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.

APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00041271(







AUTHOR:

Fedorova, N. I.

509

TITLE:

Infrared spectrum of the northern night sky in the region 9500 - 11500 A. (Infrakrasnyy spektr severnogo

nochnogo neba v oblasti 9500-11500 X).

PERIODICAL: "Astronomicheskiy Zhurnal" (Journal of Astronomy),

1957, Vol.34, No.2, pp.247-249 (USSR).

ABSTRACT:

The relative intensities of hydroxile bands in the region 9500 - 11500 A in the spectrum of the northern night sky, which have been recorded near Murmansk, are reported. A spectrograph with an electron-optical converter, having a dispersion of the order of 230 A was used. The results obtained The results obtained are in agreement with results of the Soviet workers Lukashenya and Krasovskii (7). However, they are in disagreement with some of the absolute intensities as worked out by Roach for the near infra-red region (1). 2 tables, 2 figures, 7 references, 5 of which are

Russian.

Physics of the Atmosphere Institute

Ac. Sc., USSR.

Recd. Nov.13, 1956.

FEDOROVA, N.I., Cand Phys-Math Sci — (diss) "Study ofhydroxyl radiation of Anight sky." Mos, 1959. 7 pp (Acad Sci USSR. Inst of Physics of the Atmosphere). 130 copies (KL, 37-59, 106)

12

SOV/49-59-6-5/21

AUTHOR: Fedorova, N. I.

The Hydroxyl Emission of the Upper Atmosphere. TITLE:

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geofizicheskaya, 1959, Nr 6, pp 836-846 and 2 plates (USSR)

The results are described of the measurements of the ABSTRACT: relative and absolute intensity of the hydroxyl bands in the region of 8200-11 200 Å. The investigations took place in the winter of 1956-1957 in Byurakansk observatory (  $\phi$  = 40°21',  $\lambda$  = 44°15') with the spectrograph SP-50. The calculations were performed according to Roach (Refs and 29). The results of the measurements are illustrated in Figs 1-4 and tables 1-5. Figs 1-3 illustrate the actual spectra photographed with an exposure of 0.01 sec. Fig 4 shows the intensity of different bands obtained from measurements (1) and from calculations (2). The following were tabulated: Table 1 - relative intensity of the hydroxyl bands. Table 2 - absolute and relative intensity of OH bands. Table 3 - intensity of OH bands in units of the green line. Table 4 - the number of lines of vibrations of the OH molecule. Table 5 - rotational temperature of OH bands in night-sky emission. It was observed that the absolute intensities of the band OH represent the number of lines related to various vibrations. This number

Card 1/2

SOV/49-59-6-5/21

The Hydroxyl Emission of the Upper Atmosphere

gradually increases with a decrease of V' (Fig 5). The rotational temperature, as determined from the distribution of intensities (equations at top of p 843), was found to be  $233^{\circ} \pm 16^{\circ}$ K. There are 5 figures, 5 tables and 36 references, of which 12 are Soviet, 19 English, 4 French, 1 German.

ASSOCIATION: Akademiya nauk SSSR, Institut fiziki atmosfery (Academy of Sciences, USSR, Institute of Physics of the Atmosphere)

SUBMITTED: October 5, 1958.

Card 2/2

21 (7), 3 (7) AUTHOR: Fedorova, N. I. SO7/20-125-3-19/63 The Spectra of the Night Sky in the Range 8200-11200 A TITLE: (Spektry nochnogo neba v oblasti 8200-11200 A) Doklady Akademii nauk SSSR, 1959, Vol 125, Nr 3, PERIODICAL: pp 535-537 (USSR) ABSTRACT: By means of the spectograph SP-50 with electron-optical multiplior, night sky spectro in the region  $\lambda$  8200-11200  $\Re$  were taken in the yumkan observatory during the winter of 1956 = 1.57 ( $\phi = 40^{9}$ 21',  $h = 44^{9}$ 15'). The dispersion of the instrument amounted to ~160 %/mm, the resolving power to 7 A. This was sufficient for finding the OH-spectra with a P-branch resolved into the rotation structure. The whole range investigated was covered by five series of spectra the photographs of which are shown in a figure. For each series of the spectra the average intensity distribution in the OH-bands was taken in several nights. The relative intensity of OH-bands varies by 10 - 50 % from night to Card 1/4 night, and the average intensity distribution was thus

The Spectra of the Night-Sky in the Range 8200-11200 3 SOV/20-125-3-19/65

found with an exectness of 10 - 15 %. A table gives the relative intensities of OH-bands in units of  $Q_{(4-1)}$  with an exactness of 20 %. The absolute intensities of OH-bands were determined by means of a green line which was taken in the second order in one of the spectral series under investigation. From the absolute intensities of ON-bends the degree of occupation of the various vibration levels was determined. This degree rather smoothly increases with a decrease of the degree V' of occupation of the initial vibration levels, and no preferential occupation of the ninth rotation level was observed. From the distribution of intensity in the rotational fine structure of the OH-bands (which are irradiated by the night sky) the rotation temperature was derived, and for this purpose the intensities of the rotation lines of the strong component <sup>π</sup>3/2 of the resolved P-branches were used. A formula is given for the distribution of in the rotation structure. From the results of some nights, the value of the average temperature was derived to be 230  $\pm$  17° K (This value was found for the series  $\triangle V = 4$ ).

Card 2/4

The Spectra of the Night Sky in the Range 8200-11200 A

307/20-125-3-19/63

For the series  $\triangle V = 3$  the temperature 236 ± 15° X was found. The temperature determined from various bands is thus equal within the limits of experimental errors. This fact shows that the rotation temperature of OH-molecules is (at least approximately) equal to the temperature of the medium. The avorage value of the temporature 233 ± 160 K. which was found by the author in the Byurakan observatory  $(\psi = 40^{\circ}21^{\circ})$ , is nearly equal to the temperature value 240 ± 20° K found by V. S. Prokudina in the Zvenigorodskaya stantsiya (Zvenigorod Station) (v = 550421). But this temperature values are strongly different from the temperatures found in stations situated in higher northern latitudes. In the opinion of the author, therefore, the temporature in a rather distinct manner depends on the latitude. The author thanks I. S. Shklovskiy and V. I. Krasovskiy for their help and for supervision of the present paper as well as G. A. Gurzadyan, in whose laboratory the investigations discussed in the present paper were carried

Card 3/4

The Spectra of the Night Sky in the Range 300/20-125-3-19/65 a200-11200 A out. There are 2 figures, 2 tables, and 12 references, 4 of which are Soviet.

ASSOCIATION: Institut fiziki atmosfery Akadomli nauk SSSR (Institute for the Physics of the Atmosphere of the Academy of Sciences USSR)

PRESENTED: October 14, 1958, by V. G. Fesenkov, Academician SUBMITTED: October 12, 1958